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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|--------------------------|---------------------|------------------|
| 10/573,766 | 03/29/2006 | Rui Resendes | CH8354PS1148 | 3999 |
| <div>Jennifer R. Seng Lanxess Corporation Law & Intellectual Property Department 111 RIDC Park West Drive Pittsburgh, PA 15275-1112</div> | | | | |
| <div>759005/28/2008</div> | | | | |
| <div>EXAMINER</div> | | | | |
| <div>HARLAN, ROBERT D</div> | | | | |
| <div>ART UNIT</div> | | <div>PAPER NUMBER</div> | | |
| <div>1796</div> | | | | |
| <div>MAIL DATE</div> | | <div>DELIVERY MODE</div> | | |
| <div>05/28/2008</div> | | <div>PAPER</div> | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/573,766

Applicant(s)

RESENDES ET AL.

Examiner

Robert D. Harlan

Art Unit

1796

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/02/2008 has been entered.

2. The Amendment and Petition for Time Extension filed by Applicant on 04/02/2008 has been entered.

Response to Amendment/Arguments

3. Applicant's amendment and arguments filed on 04/02/2008 have been fully considered and they are found persuasive.

4. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Resendes, U.S. Patent No. 6,706,804 (hereinafter "Resendes") in combination with Cruse et al., U.S. Patent No. 6,608,125 (hereinafter "Cruse").

Art Unit: 1796

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hergenrother et al., U.S. Patent No. 6,180,710 (hereinafter "Hergenrother") in combination with Cruse et al., U.S. Patent No. 6,608,125 (hereinafter "Cruse"). Hergenrother

teaches a composition precipitated silica, adherent inorganic salts, a byproduct of precipitated silica that promotes better interaction between silica and rubber, which is selected of halobutyl rubber (commonly referred to as bromobutyl), among others. See Hergenrother, col. 2, line 40 through col. 4, line 165 and col. 4, lines 60 through col. 5, line 19. Hergenrother further teaches the use of silane coupling agents including silanes that can have mercaptan groups. See Hergenrother, col. 2, lines 7-10 and col. 4, lines 17-37. Hergenrother also teaches as shown in Table IV a process for curing a filled rubber composition. See Hergenrother, col. 11, lines 52-67, Table IV. Hergenrother differs from the present invention in that the present invention requires a protected thiol modifier (blocked mercapto silane). Cruse teaches in analogous art a block mecaptosilane-coupling agents for filed rubbers. See Cruse, Abstract; col. 2, lines 22-53. In view of Cruse, one having an ordinary skill in the art would be motivated to modify Hergenrother by using an block mecaptosilane-coupling agents in the filled rubber composition because Hergenrother makes it clear that silane coupling agents with mercapto- groups are desirable with its filled rubber composition. Such modification would be obvious because one would expect that the use of a filled rubber composition as taught by Hergenrother is to be

similarly useful and applicable to the filled rubber composition taught in Cruse. The two references are not only both directed to rubber compositions but also are both directed to filled rubber composition with silane based additives.

8. Applicants contend Cruse fail to cure the deficiency of Resendes because Cruse fails to teach or suggest the use of halobutyl elastomers in combination with protected with protected thiol modifiers. This is an incorrect motivational analysis. The halobutyl elastomer is not a deficiency in Resendes and as stated by the Examiner the motivation arises out of both references being direct to silica filled compositions.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert D. Harlan whose telephone number is (571) 272-1102. The examiner can normally be reached on Mon-Thu, 10 AM - 8 PM.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David W. Wu can be reached on (571) 273-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert D. Harlan/
Primary Examiner
Art Unit 1796

rdh